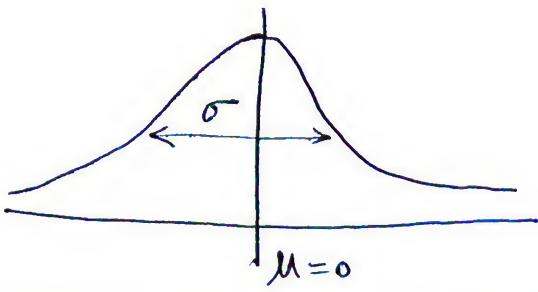


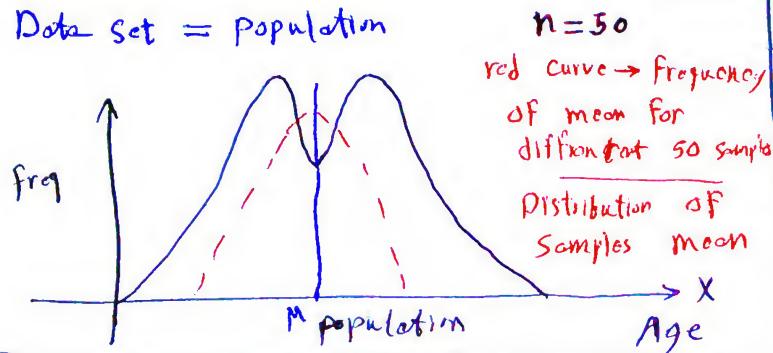
Information Systems

Section 6

Standard Normal Distribution



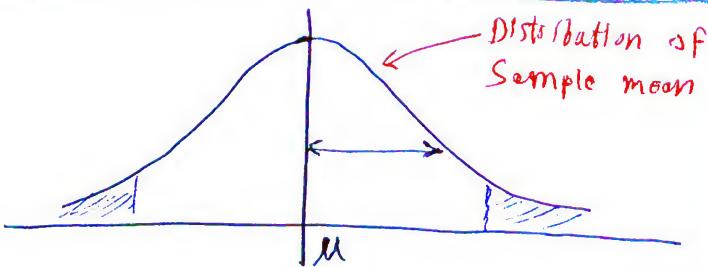
Data set = population



Standard Normal \leftrightarrow Distribution of sample mean distribution

$$Z = \frac{X - \mu}{\sigma}$$

mean of Sample mean distribution is the same as mean of population



$$SE = \frac{\sigma}{\sqrt{n}} \rightarrow \text{Standard Error}$$

$SE \rightarrow \sigma$ of Sample mean curve

$\sigma \rightarrow \sigma$ of Population curve

$n \rightarrow$ number of Sample

$\mu \rightarrow$ Mean of population

زوجات Samples نون معاشر -
 \bar{X} سعرات سعرات معاشر -
 mean معاشر ينجز في 0.5 -
 $P(Z)$ بحسب Probability نتائج

$$Z = \frac{\bar{X} - \mu}{SE} \rightarrow P(Z)$$

$P(Z) \rightarrow P\text{-Value}$